UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,357	09/07/2000	Kenneth P. Weiss	W0537/7005	1625

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EXAMINER
FLANDERS, ANDREW C

ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 December 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18,23,28-30 and 36-40* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-18,23,28-30 and 36-40* is/are rejected.

7)☒ Claim(s) *5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 December 2005 has been entered.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection necessitated by Applicant's amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 4, 8 – 18, 23, 28 – 30 and 36 – 40 are rejected under 35 U.S.C.

103(a) as being unpatentable over Whitby (U.K. Patent Application 2 258 102 A) in view

of Thomason (U.S. Patent 6,018,612)

Regarding **Claims 1 and 23**, Whitby discloses:

A repeat circuit for use with an audio receive and reproduce device that has a

normal mode and a replay mode (Fig. 2) including:

a RAM having an input connected to a receiving input and an output connected

to a replay audio into of said audio receive and reproduce device (i.e. Fig. 2 element

32);

a control adapted to switch said audio receive and reproduce device into a replay

mode by inhibiting application of income audio (i.e. a time shifted mode of operation in

which the direct audio output is disabled; page 10)

and for instead applying at least a portion of audio inputs stored in said RAM as

audio inputs to said device via the replay audio input of said device (i.e. instead the

received signal stored in memory is played back; page 10);

the audio reproduced by said device being selectively delayed from incoming

audio inputs by a time dependent on where in said RAM said control begins the

applying of audio inputs to said device (i.e. and the received signal that is stored in

memory in a digitized form is withdrawn from the memory after a period of delay,

converted back to an analog signal and passed to the audio output, this gives the reproduction of the transmitted program with a time shift; page 10).

Whitby does not explicitly disclose:

wherein said device is configured to automatically control the rate at which said RAM is read out to said replay audio input of said device, said RAM being read out to said replay audio input of said device at a replay rate that is different than an incoming rate at which the incoming audio inputs are received to be stored in said RAM, or wherein said replay rate is selected so as to gradually eliminate the delay time without substantially impairing audio quality of the replayed audio, thereby automatically returning said device to normal mode.

Thomason discloses a means of accelerating the viewing of a historical program (including the audio) in which a user can catch up with the live broadcast by accelerating the playback, the acceleration factor of a few percent is practically unnoticed by the viewer; col. 2 lines 15 - 30.

Applying this teaching to the Whitby receiver reads upon the limitations of:

wherein said device is configured to automatically control the rate at which said RAM is read out to said replay audio input of said device, said RAM being read out to said replay audio input of said device at a replay rate that is different than an incoming rate at which the incoming audio inputs are received to be stored in said RAM; and

wherein said replay rate is selected so as to gradually eliminate the delay time without substantially impairing audio quality of the replayed audio, thereby automatically returning said device to normal mode.

It would have been obvious to one of ordinary skill in the art at the time of the

invention to apply the teachings of Thomason to the device disclosed by Whitby. One

would have been motivated to do so in order to be able to start a program on the Whitby

device well after it started, to maintain continuity after interruption, have the ability to

replay, or playback in slow motion; see Thomason col. 1 lines 1 – 67 and col. 2 lines 1 –

51.

Regarding **Claims 36 and 37**, in addition to the elements stated regarding claims

1 and 28, the combination further discloses:

a manually operable input component, and wherein said control is operable in

response to a selected input from said input component, to switch said audio receive

and reproduce device into replay mode (i.e. user operable means to allow the user to

output a program as desired; page 3 lines 4 – 13 in Whitby).

Regarding **Claim 2**, in addition to the elements stated above regarding claim 36,

the combination further discloses:

wherein the location in said RAM at which the applying of audio inputs begins,

and thus the delay between incoming audio inputs and reproductions is controllable, in

response to selective operation of said component (i.e. Whitby further discloses the

user can jump backwards during the reproduction to adjust the time shift; page 11 lines

20 – 25)

Regarding **Claim 3**, in addition to the elements stated above regarding claim 2,

the combination further discloses:

wherein said delay is a function of at least one of the number of times said

component is operated and the time said component is operated (i.e. Whitby further

discloses a user can give a pause command which causes the device to cease

reproducing the program in real time and instead stores the signal in memory until the

user gives a continue command and after this it reproduces the program with a time

shift corresponding to the interval between the pause and continue commands; page 11

lines 8 – 15).

Regarding **Claim 4**, in addition to the elements stated above regarding claim 2,

the combination further discloses:

Wherein when said device is receiving inputs from said RAM, the circuit is in

replay mode, and including an output element providing a selected indication that said

circuit is in said replay mode (i.e. Whitby discloses a mode in which the stored digitized

program is withdrawn, converted to an analog signal and passed to the audio output

(page 10 lines 13 – 20) (i.e. wherein when said device is receiving inputs from said

RAM, the circuit is in replay mode), an alpha-numeric display device (fig. 2 element 28)

(i.e. an output element) and the display showing the transmission; page 7 lines 1 – 7).

The combination fails to explicitly disclose said output element also providing an

indication of said delay. However, it would have been obvious to one of ordinary skill in

the art to provide an indication of delay. In the combination, the user may select to

catch up with the live broadcast while playing a portion of the broadcast that had been

recorded and is delayed by a given amount of time. Providing a user with an indication

of how close the system was to reaching the live broadcast would be a desirable and

obvious feature to add.

Regarding **Claim 8**, in addition to the elements stated above regarding claim 36,

the combination further discloses:

wherein said RAM is a wrap-around memory, the oldest audio input therein being

written over when a new audio input is received and said RAM is full (Whitby discloses

that if the memory has sufficient capacity to store 15 minutes and recording continues

past that, the data would be overwritten; page 10 lines 24 – 25 and page 11 lines 1 – 4)

and wherein said control inhibits writing over audio inputs in said RAM in

response to a selected input component, the circuit being in storage mode when this

occurs (i.e. Whitby discloses if a user wants to record a particularly program the user

may set it to not be recorded over by the next program; page 13 lines 10 – 17)

and wherein said control causes incoming audio inputs to be applied to said

device when the circuit is in storage mode (i.e. and the audio signal from the tuner

section can pass directly to the audio output; page 7 lines 17 – 18).

Regarding **Claim 9**, in addition to the elements stated above regarding claim 8,

the combination further discloses:

wherein said control is operative when the circuit is in storage mode to cause at

least selected portions of audio inputs stored in said RAM to be reproduced on said

device in response to a selected input from said input component (i.e. Whitby discloses

user operable means to allow the user to output a program as desired; page 3 lines 4 –

13; and instead the received signal stored in memory is played back; page 10 lines 14 –

17)

Regarding **Claim 10**, in addition to the elements stated above regarding claim 9,

the combination further discloses:

wherein said selected input is said input component being manually operated for

a selected time interval (i.e. Whitby further discloses user operable means to define at

lest one program to be stored or retained in memory; page 3 lines 4 – 8)

Regarding **Claim 11**, in addition to the elements stated above regarding claim 1,

the combination further discloses:

wherein said device is a radio, and wherein said circuit is returned from replay

mode to a normal mode with incoming audio inputs applied to said device when there is

a station change on said radio (i.e. Whitby further discloses a user can command the

microprocessor to tune to a desired station (page 5 lines 14 – 15) and the audio signal

passes directly to the output and to the memory in digital form (page 7 lines 18 – 23). It

is extremely obvious if not implicit that as the user changes the station the system will

begin recording as normal. This maintains the purpose of the invention given on page

11 lines 24 – 25 in which a user can playback something just heard)

Regarding **Claim 12**, in addition to the elements stated above regarding claim 1,

the combination further discloses:

wherein said control processes audio inputs applied to said RAM (i.e. Whitby

discloses user operable means to give instructions to the microprocessor (page 3 lines

4 – 5) and the microprocessor is arrange to be operable to store a digitized audio signal;

page 2 lines 22 – 23)

Regarding **Claim 13**, in addition to the elements stated above regarding claim

36, the combination further discloses:

wherein said component is operable to indicate a desired rate at which audio

inputs are to be reproduced to said device (i.e. Thomason discloses a means of

accelerating the viewing of a historical program (including the audio) in which a user can

catch up with the live broadcast by accelerating the layback, the acceleration factor of a

few percent is practically unnoticed by the viewer; col. 2 lines 15 – 30)

Also reading on the claim even more broadly, Whitby further discloses the

sampling frequency could be 22 kHz, sampling on a scale defined by 8 data bits, but

other sampling frequencies and scales of definition are within the scope of the invention

(page 8 lines 8 – 12) and that the rate is adjustable as desired (page 21 lines 18 – 25)

Regarding **Claim 14**, in addition to the elements stated above regarding claim 13, the combination further discloses:

wherein said component is operable in at least two different ways, said component being operated in a selected way to indicate a desired rate (i.e. Thomason discloses a means of accelerating the viewing of a historical program (including the audio) in which a user can catch up with the live broadcast by accelerating the layback, the acceleration factor of a few percent is practically unnoticed by the viewer; col. 2 lines 15 – 30)

Also reading on the claim even more broadly, Whitby further discloses the user can alter the quality of digitization as desired (page 21 lines 18 – 25).

Regarding **Claim 15**, in addition to the elements stated above regarding claim 36, the combination further discloses:

wherein said control is operative in response to a selected input to set said circuit into an elimination mode, said control being operative when in elimination mode to store in said RAM a selected duration of audio inputs ahead of inputs received by said RAM, and is responsive, when in elimination mode, to a selected input from said component for skipping an audio duration in said RAM which is less than said selected duration, whereby audio during said audio duration is not reproduced at said device (i.e. a means of fast-accelerating over a historical program, in this case not all television picture data

is processed, some may be skipped and not passed on for demultiplexing and

decompression; Thomason; col. 2 lines 25 – 33).

Regarding **Claim 16**, in addition to the elements stated above regarding claim

15, the combination further discloses:

wherein said audio duration is variable in response to variations in the selected

input form said component (i.e. a means of fast-accelerating over a historical program,

in this case not all television picture data is processed, some may be skipped and not

passed on for demultiplexing and decompression; Thomason; col. 2 lines 25 – 33).

Regarding **Claim 17**, in addition to the elements stated above regarding claim

15, the combination further discloses:

wherein said control is operative when in elimination mode to store said selected

duration in said RAM before applying audio inputs from said RAM to said device (i.e.

Whitby further discloses and the audio signal passes to the memory in digital form page

7 lines 18 – 23).

Regarding **Claim 18**, in addition to the elements stated above regarding claim

15, the combination further discloses:

wherein said control is operative, when in elimination mode to apply audio inputs

to said device from said RAM (i.e. Whitby further the received signal that is stored in

memory in a digitized form is withdrawn from the memory after a period of delay,

converted back to an analog signal and passed to the audio output, this gives

reproduction of the transmitted program with a time shift; page 10 lines 14 – 19)

said RAM being read out to apply inputs to said device at a slower rate than

audio inputs are received to be stored in said RAM at any time RAM is not storing at

least said selected duration of audio inputs (i.e. slow motion; Thomason; col. 2 lines 1 –

50)

Regarding **Claims 28 – 30**, all limitations in Claims 28 – 30 are met as stated

above regarding claims 1 and 18 except for wherein said radio is automatically returned

from replay mode to normal mode with incoming audio inputs applied to said radio when

there is a station change on said radio

Whitby further discloses a user can command the microprocessor to tune to a

desired station (page 5 lines 14 – 15) and the audio signal passes directly to the output

and to the memory in digital form (page 7 lines 18 – 23). It is extremely obvious if not

implicit that as the user changes the station the system will begin recording as normal.

This maintains the purpose of the invention given on page 11 lines 24 – 25 in which a

user can playback something just heard.

Regarding **Claim 38**, in addition to the elements stated above regarding claim

37, the combination further discloses:

wherein said control is operable in response to a rate indication from said input

component for controlling the rate at which said RAM is read out to apply audio inputs

(i.e. Thomason discloses a means of accelerating the viewing of a historical program (including the audio) in which a user can catch up with the live broadcast by accelerating the layback, the acceleration factor of a few percent is practically unnoticed by the viewer; col. 2 lines 15 – 30).

Regarding **Claim 39**, in addition to the elements sated above regarding claim 38, the combination further discloses:

wherein the rate at which said RAM is read out is different than an input rate at which said audio inputs are received to be stored (i.e. Thomason discloses a means of accelerating the viewing of a historical program (including the audio) in which a user can catch up with the live broadcast by accelerating the layback, the acceleration factor of a few percent is practically unnoticed by the viewer; col. 2 lines 15 – 30).

Regarding **Claim 40**, all limitations in Claim 40 are met as stated above regarding claim 1.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Whitby (U.K. Patent Application 2 258 102 A) in view of Thomason (U.S. Patent

6,018,612) in further view of Oftedahl (U.S. Patent 6,449,768).

Regarding **Claim 6**, in addition to the elements stated above regarding claim 1,

the combination further discloses:

wherein when said device is receiving inputs from said RAM, the circuit is in

replay mode (i.e. Whitby discloses a mode in which the stored digitized program is

withdrawn, converted to an analog signal and passed to the audio output; page 10 lines

13 – 20)

Whitby does not disclose a multicolor LED, the LED displaying one color for

replay mode, and a second different color for normal mode with incoming audio inputs

applied to the device.

Oftedahl discloses various LEDs to indicate the mode of operation (fig 2

elements 88, 90, 92 and 94).

Oftedahl does not disclose the exact mode of operation of the LED as claimed by

applicant, however it would have been obvious to one of ordinary skill at the invention to

use different or multicolored LEDs to indicate the mode of operation. One would have

been motivated to do so to make the device more user friendly by showing the user the

exact mode of operation they device was in.

Regarding **Claim 7,** in addition to the elements stated above regarding claim 6,

the combination further discloses:

wherein said RAM is a wrap-around memory, the oldest audio input therein being

written over when a new audio input is received and said RAM is full (i.e. Whitby

discloses that if the memory has sufficient capacity to store 15 minutes and recording

continues past that, the data would be overwritten; page 10 lines 24 – 25 and page 11

lines 1 – 4)

and wherein said control inhibits writing over audio inputs in said RAM in

response to a selected input component, the circuit being in storage mode when this

occurs (i.e. and if a user wants to record a particularly program the user may set it to not

be recorded over by the next program; page 13 lines 10 – 17)

Whitby does not disclose said LED displays a third color when said circuit is in

storage mode.

Oftedahl discloses various LEDs to indicate the mode of operation (fig 2

elements 88, 90, 92 and 94).

Oftedahl does not disclose the exact mode of operation of the LED as claimed by

applicant, however it would have been obvious to one of ordinary skill at the invention to

use different or multicolored LEDs to indicate the mode of operation. One would have

been motivated to do so to make the device more user friendly by showing the user the

exact mode of operation they device was in.

Allowable Subject Matter

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brodsky (U.S. Patent 5,774,186).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7546. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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Business Center (EBC) at 866-217-9197 (toll-free).

SINH TRAN
SUPERVISORY PATENT EXAMINER

acf